



State of Nevada – Department Of Personnel

CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
SUPERVISOR IV, REGISTERED PROFESSIONAL ENGINEER	42*	B	6.207
OPTIONS: <u>Department of Transportation</u>			
A. Construction Division			
B. Location, Photogrammetry and Cartography Division			
C. Materials and Testing Division			
 <u>Department of Conservation and Natural Resources</u>			
D. Division of Environmental Protection			
E. Division of State Parks			
F. Division of Water Resources			
 <u>Department of Human Resources</u>			
G. Bureau of Health Protection Services			
 <u>University of Nevada</u>			
H. UNR - Electrical Engineering Department			
 <u>Department of Commerce</u>			
I. State Fire Marshal Division			

Under direction, supervise programs and/or functions as defined within the option of a professional engineering nature requiring considerable professional training and experience and a demonstrated capacity to perform at a high level of competency; use discretionary judgment in interpreting and applying federal and State regulations and departmental/divisional policies and procedures; analyze and evaluate complex engineering programs/functions and exercise sound judgment with respect to recommendations.

Positions at the Supervisor IV level supervise professional and technical engineering employees and perform professional engineering functions requiring the exercise of judgment in the analysis of complex data and the application of recognized concepts and principles to difficult problems that impact daily operations, recommendations and the development of new policies, procedures and organizational areas or services. Activities consist of duties that result in significant portions of decisions made in conjunction with others.

Incumbents deal with management at a higher level at or above the supervisor's level to include both internal and external contacts and may deal with executives, officials and regulatory representatives generally to solve problems involving some conflict requiring interpretation/application of policy or to negotiate solutions to major and/or controversial issues within policy guidelines.

ALL OPTIONS

Plan, organize, schedule and oversee program/function activities by coordinating activities with other sections, divisions, and agencies to complete assignments without unnecessary duplication of resources; preparing reports, letters, memos, agreements, forms and notes to communicate information to others; reviewing reports, letters, memos, agreements, forms and notes prepared by staff members for completeness, accuracy and compliance with regulations and policy; compiling and presenting complex technical

*** Reflects a 2-grade, special salary adjustment authorized by the 2001 Legislature to improve recruitment and retention.**

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CLASS CONCEPTS (cont'd)**ALL OPTIONS (cont'd)**

engineering information to management and in briefing meetings; attending public meetings and hearings to provide technical expertise to the public and other entities; and may be involved in writing, reviewing, negotiating and securing agreements with consultants and/or contractors and coordinating their activities.

Perform supervisory duties to include assigning and reviewing work; reviewing and approving time sheets and travel requests; conducting employee evaluations; determining training needs and implementing training activities; and forecasting staffing needs. Perform budgetary duties to include preparing and negotiating draft budget requests and reviewing purchase requests for supplies, equipment and services for compliance with budget approval.

Perform related duties as assigned.

DEPARTMENT OF TRANSPORTATION

Construction Division: Manage the activities of the Pavement/Structures Quality Control Section of the division and direct the activities of the progress testers located in the districts; provide quality control through field inspections and training; review and analyze daily field reports to ensure quality control procedures are being followed and to verify that specifications are being enforced; troubleshoot field inspection and materials testing problems; train personnel in the use of new materials, testing equipment and testing procedures; administer the in-house technician training program for field testing procedures, construction, inspection and surveying techniques; revise manuals by rewriting test methods, developing new test methods, or by issuing policy and procedure directives to the engineers to clarify, change, or delete procedures.

Develop, interpret and review construction related specifications to ensure specifications are reasonable, enforceable, and result in completed projects that will function according to the designed needs and intent.

Location, Photogrammetry and Cartography Division: Plan, organize, schedule and oversee the layout of all survey projects for the department by discussing projects with representatives of all divisions within the department and other involved agencies to determine limits of the areas to be covered and the types of survey data needed; researching cartography, engineering files, geodesy, right-of-way engineering and other sources to obtain data on centerlines and right-of-way lines to be set in the field; determining flight lines and placement of needed survey control points for aerial survey projects; determining placement of centerlines, offset lines, traverses, etc., needed for conventional location survey projects; determining through map sheets and/or plan sheets whether right-of-way points needed to be set can be set from existing survey control or if a traverse needs to be run through the projects; executing project reconnaissance to search for survey control to be used and/or property corners and section corners to be tied; and conducting a project orientation with personnel assigned to the project.

Materials and Testing Division: Plan, organize, schedule and oversee the Las Vegas Materials and Testing laboratory facility.

Manage facility by overseeing operations programs; investigate premature failures of highway materials and identify questionable materials used in highway construction; maintain a final record sampling of the program for proper quality of highway construction; and perform preliminary design testing and analysis of materials for designing highway construction. Provide on-site evaluation of materials for design and construction to resolve problems related to quality and structural integrity; evaluate testing equipment procedures and provide recommendations on interpretations of testing procedures and organizational functions of testing equipment; and provide administration with recommendations regarding the operation of the Las Vegas facility.

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DEPARTMENT OF TRANSPORTATION (cont'd)**Materials and Testing Division** (cont'd)

Perform contract plan reviews of materials and equipment to improve specifications for new and current materials products, ensure proper use of all available material, and develop specifications necessary for the purchase of new or upgraded equipment necessary for the continuation of materials testing.

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES:

Division of Environmental Protection: Plan, organize, schedule and oversee the operations of either the Nevada State Petroleum Fund, the Compliance Branch of the Bureau of Air Quality, the Facilities Management Branch of the Bureau of Waste Management, or the Permits Branch of the Bureau of Water Permits and Compliance.

Nevada State Petroleum Fund: Manage the operation of the Nevada State Petroleum Fund by developing policies, regulations, and standards in conformance with federal and State requirements; coordinate the functions of the State Board to Review Claims; report on the status of funds and propose solutions to questions from board members; review and analyze requests for funds for compliance with regulations, engineering procedures and technology, cost of remediation and necessity of work performed; and report findings and make recommendations to the Board.

Investigate and evaluate the release of chemicals into the environment which may adversely effect public health or environmental quality; ensure costs for corrective action of a petroleum storage tank leak are reasonable and administer payments for work completed.

Bureau of Air Quality: Manage the compliance branch of the Bureau by reviewing and monitoring the grant performance enforcement requirements of the Environmental Protection Agency (EPA) to ensure compliance with Nevada sources and funding of the enforcement program; determine source compliance and issue Notices of Violation and Stop Orders if a source is out of compliance; and review new and existing federal and State regulations and air quality permits issued to determine if a regulation or permit is enforceable. Review engineering designs for control devices and monitoring systems to determine soundness of the engineering design; review engineering test reports to verify if testing procedures have been conducted in accordance with EPA standards and prepare a summary of the review and letter of acceptance or deficiencies in the testing.

Prepare and conduct enforcement conferences with sources found in violation; and negotiate compliance schedules for corrective action; prepare and present administrative stipulation and order containing corrective actions, civil fines, and compliance schedule before the State Environment Commission (SEC) for approval.

Perform power plant inspections to verify compliance with air quality permits; perform power plant emission monitoring audits and prepare technical audit reports to ensure accurate emission data is being recorded and reported.

Bureau of Waste Management/Facilities Management Branch: Manage the permitting program for hazardous waste treatment, storage and disposal facilities; direct the inspection program and coordinate the enforcement for hazardous waste treatment, storage and disposal facilities; attend enforcement conferences with staff and violator to assess technical adequacy of violator's response to the violation cited in the enforcement action; testify in court or before the SEC during civil or criminal enforcement cases; and manage the corrective action program for remediation of sites contaminated with hazardous waste.

Analyze, develop and review proposed legislation and regulations to determine impacts on State hazardous waste program; prepare memoranda assessing impacts of proposed legislation; and draft new regulations and legislation governing hazardous waste facilities.

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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (cont'd)**Bureau of Waste Management/Facilities Management Branch** (cont'd)

Administer grants and prepare budgets by preparing biennial budgets for the Resource Conservation Recovery Act Facility Branch; originating draft work plans and negotiating with the Federal Environmental Protection Agency (EPA) the work tasks to be performed with grant funds from them; writing workplans detailing the tasks and budget for each element to include permitting and inspecting facilities; supervising the preparation of quarterly reports; meeting with the EPA staff for mid-year and end-of-year evaluations of staff grant commitments; and negotiating with the EPA for extensions or alternative tasks due to changes in State priorities of work.

Bureau of Water Permits and Compliance: Plan, organize, schedule and oversee the operations of the Water Permits Branch of the Bureau; develop regulations and policies for review and approval of the bureau chief and the division administrator to promote changes in policy that will further protect the water quality of the State; and issue water pollution control discharge permits after reviewing the area wide Water Quality Management Plan to verify that the proposed discharge meets the conditions of the plan. Evaluate the proposed water treatment process to determine what limits need to be placed in the permit; review the cost effectiveness of the treatment process; determine the mixing zone requirements; and prepare and send out public notices, mailing lists and fact sheets to inform the public and other government agencies of the division's intent to issue the permit.

Prepare annual budgets and workplans for submittal to the Environmental Protection Agency (EPA) and division administrator to ensure that funding will be obtained in a timely manner.

Division of State Parks: Manage all phases of construction administration for State Park projects; supervise or perform construction layout and staking to provide the contractor with the necessary data for construction of the proposed improvements; coordinate the efforts of park staff, utility companies, other agencies, and special interest groups with the efforts of the contractor; conduct on-site inspections to verify that the quality of work meets the requirements of the specifications; set up a meeting for final inspection once construction of a project is substantially complete; prepare a Notice of Completion to be published in the local paper and recorded at the office of the county recorder; prepare a set of reproducible record drawings that show all changes to the original plans made during construction; and set up a project review meeting with field staff to review problems and recommend changes in procedure or design to eliminate problems on future projects.

Manage planning design and project design functions; supervise and perform topographic and hydrologic field surveys; supervise or perform the reduction of raw survey data to numerical data to be used to prepare base sheets for plans; prepare conceptual designs for the project and review them with the staff; prepare preliminary designs that conform to various regulatory agencies' requirements; and prepare final plans, specifications and construction estimates and place engineer's seal on the plans in accordance with NRS 625.230. Provide engineering review expertise by reviewing the work of other designers within the Planning and Development Section and making recommendations regarding the engineering feasibility of their designs; review and make recommendations regarding reports, proposed legislation and regulations with respect to their impact on the development and maintenance of park facilities; review boundary surveys and legal descriptions; and review technical reports and information from manufacturers regarding engineering issues, items or products which may be applicable to State Parks' purposes. Manage the monitoring program for underground storage tanks and piping containing gasoline or diesel fuel to ensure compliance with federal Environmental Protection Agency regulations. This duty includes performing advance planning, preparing budget estimates, and providing project management for future upgrading and/or removal and replacement of existing underground storage tanks and supervising field staff on all matters pertaining to the maintenance, removal and replacement of underground storage tanks.

Manage the administration of water rights permits for all State parks and recreation areas; prepare and submit water rights applications to the State Engineer's office to obtain the use of any surface or underground water

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DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (cont'd)**Division of State Parks** (cont'd)

source; develop the water source and file a Proof of Completion with the State Engineer's office; file Proofs of Beneficial Use that measure the amount of water being beneficially used; file a map with the State Engineer's office to show the place and manner of diversion, all works, and place and manner of use; file Extensions of Time when any proofs or maps cannot be filed on time; and maintain a file of water use records for each park and periodically verify that the parks do not exceed their allowable water rights allotments.

Division of Water Resources: Plan, organize, schedule and oversee either the activities involved in water right applications or the certification of water rights.

Water Right Applications: Plan, organize, schedule and oversee the processes involved in water right applications to ensure the accurate, orderly and prompt review of water right applications for publication in compliance with application requirement.

Coordinate work activities that influence the progress of the publication review to anticipate, detect and resolve possible difficulties in order to avoid delay and expedite selected applications and implementing special requirements when needed. Direct the review of applications for publication to ensure quality of work performed and quantity of work completed to ensure proper application of procedures, practices and methods and to ensure compliance with review and publication requirements; interpret the intent of standards and requirements and advise on appropriate action to be taken to resolve problems and unusual conditions that deviate from the norm.

Certification of Water Rights: Administer the certification program of permits for the division to include coordinating the processing of proofs that the water has been placed to beneficial use; assigning field investigations for proof of beneficial use to staff members; reviewing all field investigations and draft certificates prior to final approval by the State Engineer.

DEPARTMENT OF HUMAN RESOURCES

Bureau of Health Protection Services: Plan, organize, schedule and oversee the engineering evaluation and inspection of, and the research and development of regulations and policies regarding the construction of public water systems, individual sewage disposal systems, pools, spas, R.V. parks, State Public Works Board projects, public accommodations, jails, and subdivisions of lands to ensure compliance with State statutes and regulations and division policy.

Oversee the technical interpretation and implementation of Federal Safe Drinking Water Act regulations.

DEPARTMENT OF COMMERCE

State Fire Marshal Division: Plan, organize, schedule and oversee the Plans Review Section within the division; review and approve construction plan designs and specifications of State, city and county and private facilities to ensure plan designs and specifications meet fire codes and regulations regarding hazardous materials storage, use and protection. This function includes working with industry to ensure compliance with regulations regarding hazardous materials storage and use protection and advising architects, engineers and contractors in the proper construction and protection of those plants and facilities.

Inspect State, city, county and private facilities to ensure required process construction as well as hazardous materials storage and use protection and provide professional engineering expertise to facilities' management staff in fire protection, hazardous materials storage and use protection.

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MINIMUM QUALIFICATIONS**SPECIAL NOTES AND REQUIREMENTS:**

- * Positions within this class may require specialized education and experience which will be identified at the time of recruitment.
- * Specific duties and knowledge, skills and abilities for those options not described in this class specification may be determined at the time positions are classified. Positions being classified must meet the entry level, knowledge, skills and abilities common to all options. Judgment must be applied in determining the degree to which a specific position being classified meets the intent of the class concept.
- * Any person appointed to this class on or after July 1, 1995 must be registered as a Professional Engineer in the State of Nevada, unless that person is a registered Professional Engineer in another state; in that case, that person must become registered as a Professional Engineer in Nevada within six months of appointment as a condition of employment.
- * Employees in this class who are not registered professional engineers may not represent themselves as such to other persons or entities.

OPTION B - LOCATION, PHOTOGRAMMETRY AND CARTOGRAPHY DIVISION

EDUCATION AND EXPERIENCE: Registration as a Professional Land Surveyor in Nevada with a Bachelor's degree from an accredited college or university in civil engineering or closely related engineering field and five years of progressively responsible professional engineering experience of which two years must have been in a supervisory or responsible project charge capacity; **OR** registration as a Professional Land Surveyor in Nevada and three years of experience comparable to the Geodesist II, Photogrammetrist II, Supervisor II, Associate Engineer or Staff II, Associate Engineer; **OR** registration as a Professional Land Surveyor in Nevada and one year of experience comparable to the Photogrammetrist III, Geodesist III, Staff III, Registered Professional Engineer or Supervisor III, Associate Engineer. (*See Special Notes and Requirements*)

ALL OTHER OPTIONS

EDUCATION AND EXPERIENCE: Bachelor's degree from an accredited college or university in civil engineering or closely related engineering field and five years of progressively responsible professional engineering experience of which two years must have been in a supervisory or responsible project charge capacity; **OR** certified as an Engineer in Training and five years of progressively responsible professional engineering experience of which two years must have been in a supervisory or responsible project charge capacity; **OR** one year of experience comparable to the Staff III, Registered Professional Engineer or Supervisor III, Associate Engineer. (*See Special Notes and Requirements*)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (required at time of application):

ALL OPTIONS

Detailed knowledge of: the practical application of algebra, geometry, fractions, percentages, ratios and proportions, logarithms, scientific notation and statistics. **Working knowledge of:** engineering principles and practices; the principles of engineering drafting including nomenclature, symbols, and sources of information. **Ability to:** analyze information, problems, situations, practices or procedures to define the problem, identify relevant concerns or factors, formulate logical and objective conclusions, and recognize alternatives and their implications; perform under the stress of frequent interruptions and/or distractions; perform a variety of duties, often changing from one task to another of a different nature; establish and maintain cooperative working relationships with other department members, other government agencies and the public; work independently and follow through on assignments with minimal direction; organize material, information, and people in a systematic way to optimize efficiency and minimize duplication of effort;

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MINIMUM QUALIFICATIONS (cont'd)**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)****ALL OPTIONS** (cont'd)

supervise staff including organizing work flow to accomplish established objectives, delegating responsibility, challenging subordinates to grow, training and administering necessary discipline; stay current with technical advances and apply technical procedures; take general instruction and define results; write concise, logical, grammatically correct analytical reports to explain procedures, policies and present information; interact with persons of various social, cultural, economic and educational background for the purpose of exchanging information and solving problems; set priorities which accurately reflect the relative importance of job responsibilities; apply the principles of engineering.

DEPARTMENT OF TRANSPORTATION

Construction Division - **Working knowledge of:** highway specifications and engineering principles; current principles and practices of engineering related to highway construction to properly analyze plans and specifications; the department's engineering manuals. **Ability to:** schedule the activities of the Quality Control Section and the district progress labs. **Skill in:** reading and comprehending technical documents, interpreting technical drawings and specifications to complete required duties.

Location, Photogrammetry and Cartography Division - **Detailed knowledge of:** use, care and adjustment of surveying instruments; survey methods and procedures. **Working knowledge of:** language to read and understand equipment instruction manuals and for writing reports and descriptions of survey. **Ability to:** read and interpret highway construction plans, survey plats, topographic maps, township plats, and aerial photographs.

Materials and Testing Division - **Ability to:** write concise and grammatically correct reports to explain engineering tests and associated procedures.

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES**Division of Environmental Protection**

Nevada State Petroleum Fund - **Working knowledge of:** engineering principles pertaining to construction, hydrology, soils engineering and properties of hazardous materials engineering as applied to corrective action technologies; the principles of engineering economics to analyze a multi-million dollar fund correlating available resources with projected needs. **Ability to:** write concise, logical, analytical reports directing the use of engineering principles, managing remediation activities and enforcement of regulations.

Bureau of Air Quality - **Working knowledge of:** chemical and mechanical engineering principles and mathematics such as gas laws, fluid flow laws, algebra, calculus, the metric system; reading and evaluating flow diagrams of processes, blueprints, construction drawings, plot plans, and topographical maps; physical and chemical phenomena such as steam characteristic (i.e., latent heat of vaporization); electrical wiring, monitoring equipment operation, calibration techniques, and the use of specialized tools such as voltmeters. **General knowledge of:** the nature of the criteria pollutants and air toxins including their impacts on living organisms, biological systems, and the environment. **Ability to:** maintain professional composure under stressful situations such as enforcement conferences, commission hearings, and courtrooms; write technical reports to evaluate engineered systems and industrial processes; analyze complex technical data such as ambient sulfur dioxide concentrations for determining source apportionment. **Skill in:** writing concise, logical and accurate environmental evaluations using proper English and environmental terminology.

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MINIMUM QUALIFICATIONS (cont'd)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (cont'd)**Division of Environmental Protection (cont'd)**

Bureau of Waste Management/Facilities Management Branch - Working knowledge of: engineering principles relative to chemical processes, chemistry, construction techniques, calculus, surveying, soils properties and settlement analysis, hydrology, groundwater transport, and treatment technologies; procedural statutes governing public participation and time frames for review by the Legislative Counsel Bureau and the regulations of the State Environmental Commission. **General knowledge of:** commonly used statistical tests used to assess groundwater data in determining if a significant increase in a contaminant has occurred.

Division of State Parks - General knowledge of: environmental engineering and electrical and mechanical systems. **Knowledge of:** principles of pipe hydraulics and pump design; water use patterns and rates; Uniform Plumbing Code; Uniform Fire Code; local weather and soil conditions; operations and maintenance of water systems; electrical controls; principles of open channel flow; soil percolation testing; septic design procedures; roadway design; pavement design; hydrology; Uniform Building Code; Power and Telephone Company requirements; wave action; building code requirements for reinforced concrete, foundation design and soil pressures; EPA requirements; surveying principles and practices; boundary controls and legal principles; writing and interpreting legal descriptions; federal and State regulations regarding underground storage tanks and piping containing gasoline or diesel fuel. **Ability to:** identify boundary markers, read legal descriptions, and determine the location of a proposed improvement in relation to the property lines; use and supervise the use of surveying instruments; identify the important features of a site and perform surveying to locate all features of the site which will be necessary for the design of the improvements; use engineering judgment to select the best alternative design solutions by weighing various factors such as cost, viability, local conditions, projected life, future facility expansion, operating problems, and maintenance costs; take a firm position and require consultants and contractors to perform work which is clearly required under the contract; negotiate with contractors and consultants regarding work which may require a change order to the contract for additional compensation; use engineering judgment and economic analysis to make complex decisions; make judgments on site regarding changes, additions, deletions to construction projects, especially considering the remoteness of some parks; perform field work under adverse weather conditions.

Division of Water Resources

Water Right Applications/Certification of Water Rights - Working knowledge of: hydrologic systems. **Knowledge of:** State statutes, laws, reports, customs and usage regarding water rights and water planning. **Ability to:** perform advanced hydraulic, hydrologic and other engineering related calculations; interpret, analyze and summarize complex technical data; motivate others and stimulate people to effective action; supervise staff including training, evaluating subordinate effectiveness, delegating responsibility, administering disciplinary action when needed, and organizing work flow to accomplish established objectives; organize material, information and people in a systematic way to optimize efficiency and minimize duplication of effort.

DEPARTMENT OF HUMAN RESOURCES

Bureau of Health Protection Services - Working knowledge of: engineering principles pertaining to construction, fluid mechanics, hydraulics, hydrology, soils, water treatment, and engineering economics. **General knowledge of:** the nature and health effects of microbiological and chemical agents. **Ability to:** interpret and apply State and federal laws and regulations to the prevention and abatement of environmental health hazards; maintain professional composure under stressful and confrontational situations such as denials; present information orally, and in writing, as applied to courtroom testimony and Board of Health

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MINIMUM QUALIFICATIONS (cont'd)**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES (cont'd)****DEPARTMENT OF HUMAN RESOURCES (cont')****Bureau of Health Protection Services (cont'd)**

presentations; provide written and verbal communication regarding complex technical regulations to the public; supervise, including training, administrative disciplinary action, when needed, and organize work flow to accomplish established objectives. **Skill in:** writing concise, logical and accurate complex engineering evaluations using proper English and technical terminology.

DEPARTMENT OF COMMERCE

State Fire Marshal Division - Knowledge of: federal environmental laws regarding Title III, Superfund Amendments and Reauthorization Act of 1986 as well as process standards, nationally recognized testing lab standards and construction standards; Code of Federal Regulations Parts 29 and 79 relating to transportation, use and storage of hazardous materials and the response by emergency responders to incidents involving hazardous materials; Public Law 99-499 relating to the Superfund Amendments and Reauthorization Act of 1986.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (typically acquired on the job):**ALL OPTIONS**

Knowledge of: the individual requirements of the different disciplines within the section/division to eliminate duplication and inefficient resources utilization; where to go within the organization for needed information; purchasing practices (including cost accounts, line item charges, selection of items, bid letting and authorization limits) to obtain needed supplies and equipment. **Ability to:** judge what information should be passed on to different levels of management; prioritize and make assignments to complete work in a timely manner when there are changes in importance, pressures of deadlines, competing requirements and a heavy workload; interact diplomatically with the public in a potentially hostile situation; manage and allocate equipment and materials including acquisitions and implementation; formulate ideas into policies and implement same; negotiate, exchange ideas, information and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions or solutions; coordinate multiple responsibilities by determining the time, place and sequence of actions to be taken on the basis of analysis of data; evaluate the qualifications of a job applicant in comparison with the job requirements; assess data needs for a project and direct others to obtain such data; accept equivocal circumstances and take action where answers to a problem are not readily apparent; analyze complex technical data using logic and quantitative reasoning. **Skill in:** planning and preparing budgets and analyzing costs for the fiscal year.

DEPARTMENT OF TRANSPORTATION**OPTION A: CONSTRUCTION DIVISION**

Working knowledge of: safety precautions necessary to protect the traveling public, department and contractor personnel when working in or about roadway work zones; the Federal Highway Administration's Manual on Uniform Traffic Control Devices; design methods and quantity calculation methods used by the department's design division so that plans and specifications can be reviewed properly; chart, graph, and table development to analyze construction practices; the operation of various materials testing equipment, including technical nuclear devices. **Ability to:** write audit reports, analytical reports, and technical reports to explain new specifications, policies and procedures, testing or inspection procedures, and engineering studies; lecture at engineering seminars, conferences, or training classes to present technical or professional information concerning quality control, training, or new construction ideas; operate various types of nuclear testing devices; analyze field construction data using statistical methods.

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MINIMUM QUALIFICATIONS (cont'd)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

DEPARTMENT OF TRANSPORTATION (cont'd)**OPTION B - LOCATION, PHOTOGRAMMETRY AND CARTOGRAPHY DIVISION**

Working knowledge of: where all the different types of survey data are filed and filing systems used; optimum placement and minimum density of survey control for photogrammetric bridging; geodetic surveying; construction surveying; various surveying equipment including technical data collection devices.

OPTION C - MATERIALS AND TESTING DIVISION

Detailed knowledge of: engineering procedures, construction materials, engineering principles, theory and terminology related to highway construction. **Ability to:** recognize the quality of construction materials and provide expert opinions; resolve construction materials problems; read and comprehend technical documents; write concise and grammatically correct reports to explain engineering tests and associated procedures.

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES**Division of Environmental Protection**

Nevada State Petroleum Fund - Detailed knowledge of: Nevada Revised Statutes 590.700 to 590.980 (Petroleum Fund). **Working knowledge of:** the Code of Federal Regulations CFR 40 Parts 280 and 281; Nevada Revised Statutes 459.800 through 459.856 (Storage Tank Regulatory Program).

Bureau of Air Quality - Detailed knowledge of: federal and State laws and regulations pertaining to air quality; air pollution terminology and definitions. **Working knowledge of:** a wide variety of sources of air pollution; environmental, scientific and engineering principles and practices specific to the field of air pollution; air pollution control equipment design and operation. **Ability to:** properly interpret and apply State and federal laws and regulations pertaining to air quality.

Bureau of Waste Management/Facilities Management Branch - Working knowledge of: the Nevada State Hazardous Waste Law, Nevada Administrative Code for Hazardous Waste Disposal and Code of Federal Regulations 260 through 270 relative to the regulation of generators, and hazardous waste treatment, storage and disposal facilities; sampling techniques for soils, water and groundwater to review staff sampling plans developed as part of an inspection at a permitted facility or sampling associated with an ongoing remediation; toxicological principles necessary to set cleanup standards and personal protection and safety procedures necessary to protect staff performing the sampling. **General knowledge of:** other State and local agencies' functions and responsibilities so as to coordinate permitting projects, enforcement actions and remediations. **Ability to:** negotiate with responsible parties for cleanups of contaminated sites and develop consent agreements which define each party's responsibilities and liabilities; develop biennial budgets and annual workplan budgets associated with grants from the Environmental Protection Agency.

Bureau of Water Permits and Compliance - Working knowledge of: chemical principles and nomenclature and water chemistry; wastewater treatment principles and practices, sludge treatment and disposal, and land application of water; the federal Clean Water Act and portions of the Code of Federal Regulations, Nevada Revised Statutes, and the Nevada Administrative Code pertaining to water quality; civil engineering fluid dynamics and hydrology.

Division of State Parks - Ability to: judge whether or not a site is suitable for a project from an engineering standpoint; design systems which meet the requirements of the intended purpose and comply with

OPTIONS

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MINIMUM QUALIFICATIONS (cont'd)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES (cont'd)

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES (cont')**Division of Environmental Protection (cont'd)****Division of State Parks (cont'd)**

all required codes and regulations; prepare contract documents to be used for bidding of construction projects; write contracts for construction and consultants; explain conceptual, preliminary and final plans to park field staff, accept comments and criticisms, and persuade them to accept certain aspects of the project which may be undesirable but necessary for reasons they may not have considered; negotiate fees and contracts with professional consultants; understand the position of consultants and contractors regarding conflicts or ambiguities in the contracts, plans, or specifications, and make adjustments to correct the situation; consider and analyze different and unconventional possible solutions to problems due to the remoteness and unusual nature of development and maintenance within State Parks, where water, power, phone or other normal facilities may be lacking; analyze systems operations to "trouble-shoot" problems with water systems, sewer systems, roadway systems, or other park facilities.

Division of Water Resources

Water Right Applications/Certification of Water Rights - Detailed knowledge of: Nevada Water Law pertaining to Proofs of Beneficial Use; the division's procedures for preparation and checking of certificates. **Working knowledge of:** Nevada Water Laws, statutes, customs and usage regarding water rights; the division's book records, documents and publications. **Ability to:** prepare concise, clear hydraulic engineering reports; organize and supervise the work of other staff members; meet all levels of the public and represent the division on water right matters; coordinate people and tasks by determining the time, place and sequence of actions to be taken.

DEPARTMENT OF HUMAN RESOURCES

Bureau of Health Protection Services - Detailed knowledge of: State regulations dealing with planning and zoning, planned development, sanitation, water controls, air pollution and public accommodations. **Working knowledge of:** the Federal Safe Drinking Water Act, the Code of Federal Regulations (CFR) 40, Parts 141 and 142, and the Nevada Revised Statutes (NRS) 445.361 to 445.399.

DEPARTMENT OF COMMERCE

State Fire Marshal Division - Knowledge of: State and local laws regarding Title III, Superfund Amendments and Reauthorization Act of 1986; NRS Chapters 459 and 477 relating to hazardous materials and fire protection.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

6.207

ESTABLISHED:	7/1/93P
	8/31/92PC
REVISED:	11/17/93UC
REVISED:	6/29/95UC
REVISED:	7/1/01LG